

Silicon NPN Power Transistors

2SC4689

DESCRIPTION

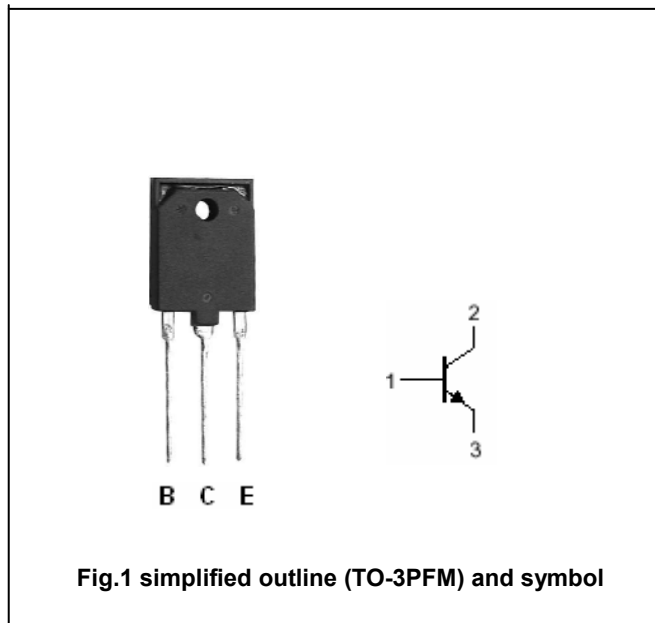
- With TO-3PFM package
- Complementary to 2SA1804
- Recommend for 70W high fidelity audio frequency amplifier output stage

APPLICATIONS

- Power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	120	V
V _{CEO}	Collector-emitter voltage	Open base	120	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		8	A
I _{CP}	Collector current-peak		16	A
I _B	Base current		0.8	A
P _C	Collector power dissipation	T _C =25□	70	W
T _j	Junction temperature		150	□
T _{stg}	Storage temperature		-55~150	□

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =50mA ; I _B =0	120			V
I _{CBO}	Collector cut-off current	V _{CB} =120V; I _E =0			5	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			5	μA
h _{FE-1}	DC current gain	I _C =1A ; V _{CE} =5V	55		160	
h _{FE-2}	DC current gain	I _C =4A ; V _{CE} =5V	35	75		
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =6A ; I _B =0.6A		0.35	2	V
V _{BE}	Base-emitter voltage	I _C =4A ; V _{CE} =5V		0.95	1.5	V
f _T	Transition frequency	I _C =1A ; V _{CE} =5V		30		MHz
C _{ob}	Collector output capacitance	I _E =0; V _{CB} =10V; f=1MHz		190		pF

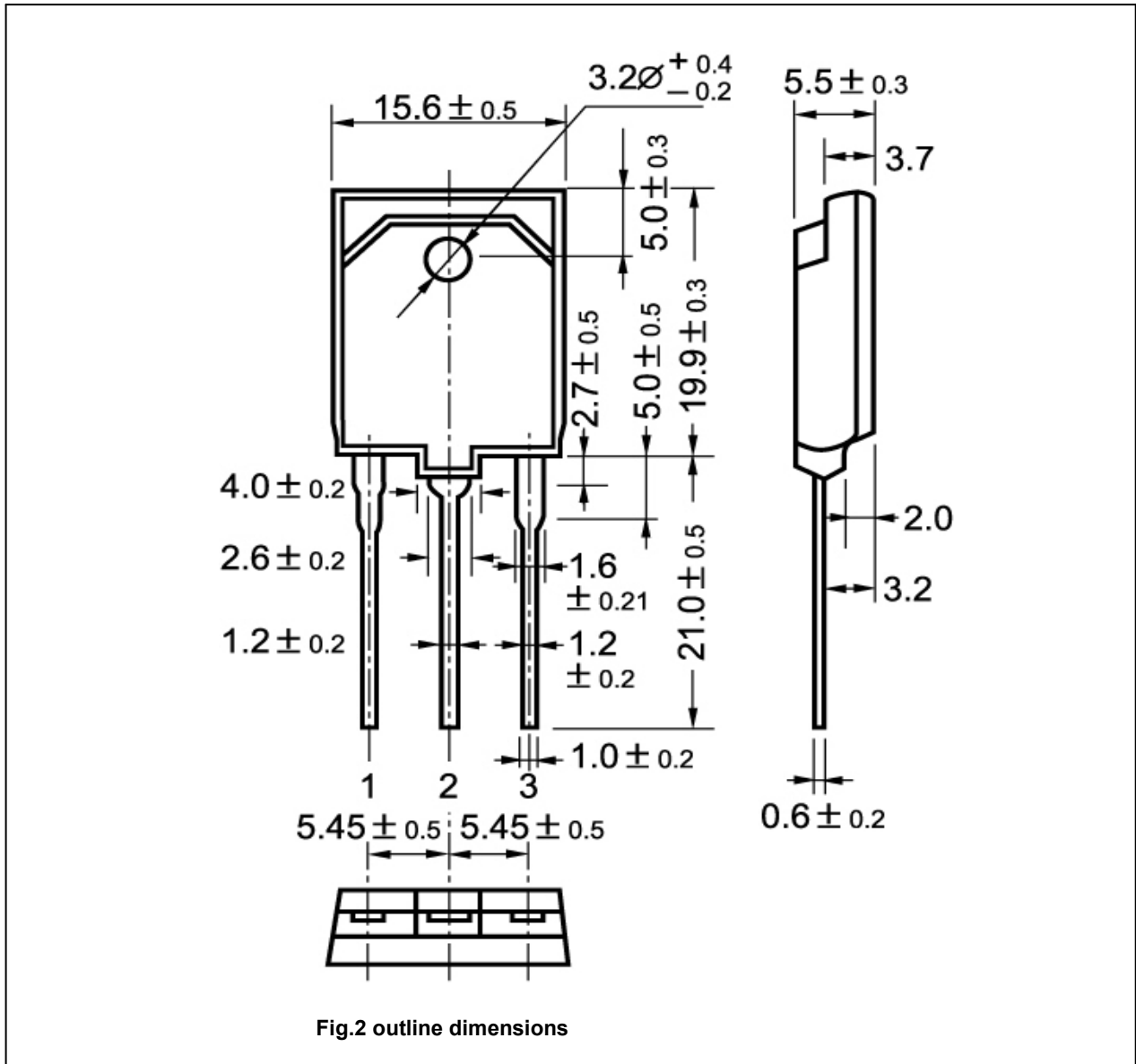
◆ h_{FE-1} classifications

R	O
55-110	80-160

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PACKAGE OUTLINE



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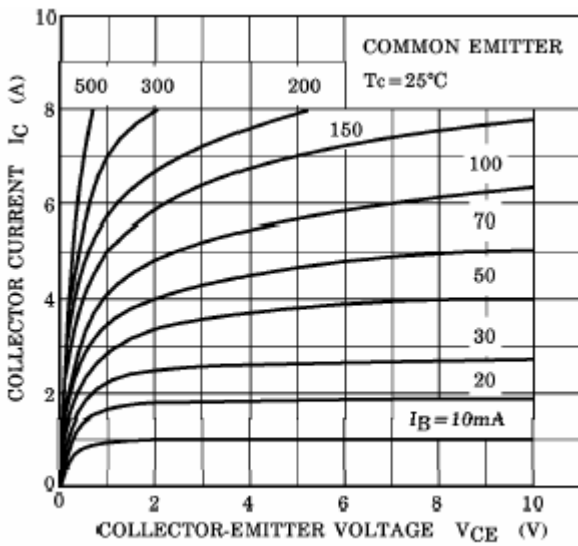


Fig.3 Static Characteristic

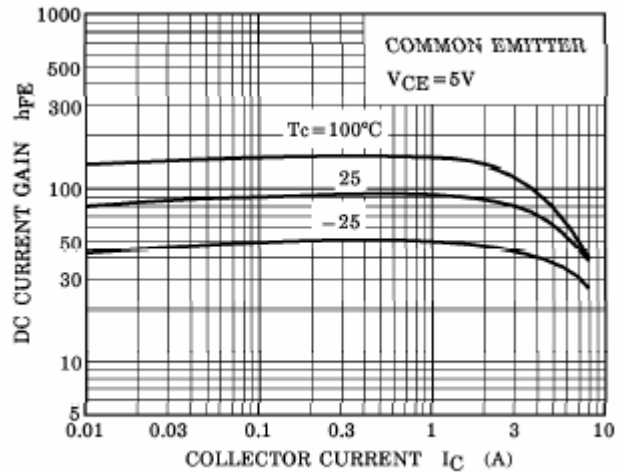


Fig.4 DC current Gain

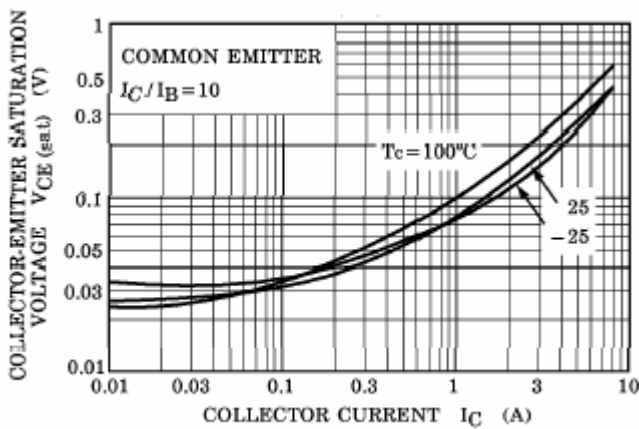


Fig.5 Collector-Emitter Saturation Voltage

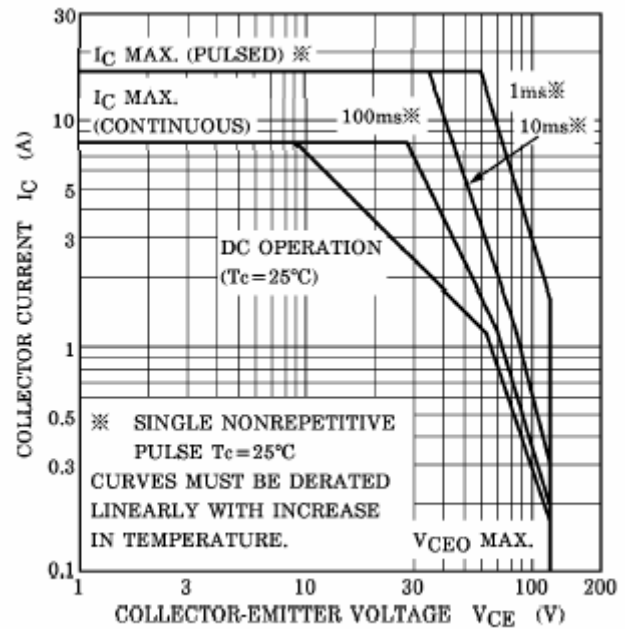


Fig.6 Safe Operating Area